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AMONG THE WONDERFUL achievements of modern explorers should be placed on record the history of the successful expedition of Capt. Willard Glazier in search of the ultimate source of the Mississippi River. This daring explorer, at the head of a large and well-equipped party, penetrated the untrodden wilderness of central Minnesota, and reached Lake Itasca, which has so long been regarded as the source of the great river. Not content with this achievement, he plunged boldly into the forest, and succeeded, after great exertions, in forcing his way three miles farther southward, where he came to a second lake, also drained by the Mississippi, and forming, as he states, its uttermost head. To this lake he gives his own name, that the fame of his achievement may be perpetuated. It is perhaps unfortunate, that, as this whole region was sectionized by the general land-office several years previously, lines having been run at every mile, a prior claim to this great discovery may arise. In any case, however, the names of Capt. Glazier and John Phenix as explorers will go down to posterity side by side.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The new commissioner of agriculture.

In your notice, April 10, of the appointment of Col Coleman to be commissioner of agriculture, you commend the selection because of his "knowledge of practical agriculture, and his experience of men and affairs," and indirectly condemn it because he does not have "any special or intimate acquaintance with the science of agriculture;" your idea seeming to be that the agricultural department should be organized as a 'scientific bureau, with a technical expert at its head.'

Col. Coleman has one additional qualification, in which he differs from all previous commissioners: he is without a pet hobby. His course will be to elevate the work of the bureau from the advocacy of some single theory, to the development of what is best in a variety of theories, and the adaptation of that best to the practical work of the agriculturist. To carry out such a course, it is not necessary that the head of the bureau should be a 'technical expert:' indeed, it is better that he should not be. Technical experts in one or two or three branches of scientific agriculture are, as a rule, those gentlemen who have bees in their bonnets, and seem to be incapable of such universal control as ought to be required; and experts in all branches cannot be found. If one have the ability to distinguish and recommend what is best, to discover and make use of the ability of specialists, to restrain the disposition in any one department of his general work to override or belittle the rest, that one is the person to have charge as the general head. Such a person is Col. Coleman. His experience of men and affairs, and the general appreciation of his fitness in the conditions you pointed out, by all classes of men, prove the wisdom of the selection.

When the bureau is to be properly organized as a scientific one, will be after the so-called agricultural colleges, founded at so enormous an expense by the general government, shall have done what they were intended to do, — raise up young men and women, first, to an appreciation of what scientific agriculture is capable; and, second, to an educational ability to pursue and apply it. Until the old ruts are abandoned by men capable of understanding the benefit of a new and well-made road, such men to be those who are practical workers themselves, there will be no use of attempting science in a place the province of which is really only the collation, selection, and diffusion of such knowledge as can be used in the gradual development of all the resources of the country. When the work of such an education is begun at the right end, it will have its natural sequence in a higher gradation of the work of the head of the agricultural bureau, if any thing higher than that which will be accomplished by the new commissioner is needed. AUG. F. HARVEY.

St. Louis, April 19.

Auroras.

Various speculations are met with from time to time as to the extent of any individual display of an aurora. A prominent French writer has recently attempted to show that auroras are not widely extended, and has instanced the case of the most brilliant aurora of modern times at Brussels, Belgium. This phenomenon occurred on Feb. 4, 1872; and the writer emphasizes the fact that it was not seen at Godthaab, Greenland. Meteorological observations at the latter place for this date are not accessible; but there is little doubt that, if there were such, it would be found that the sky was clouded, thus preventing the appearance. At all events, the observations made on the American polar steamer Polaris, which wintered about four hundred miles north of Godthaab, show the most brilliant aurora of the winter on Feb. 4. The same aurora was seen throughout the northern United States.

When we consider, that, as shown by Professor Loomis, during a maximum period of sunspots there are also the greatest number of auroras, and that great solar outbursts are followed or accompanied by magnetic storms and brilliant auroral phenomena, we are led to the view that the cause of the latter may be superterrestrial, acting either directly or indirectly through induced earth-currents.

It would seem as though all auroras are a manifestation of cosmic energy, and that their extent and brilliancy are limited by the amount of energy, by the vapor in the air, by the temperature, etc. Professor Lemström in Finland obtained a simulation of the aurora by artificial means during one winter; but during the next winter, which was barren of brilliant auroras, both he and Professor Tromholt, the latter in Iceland, failed in this. It may be that the first success was owing as much to earth-currents, or a condensation of atmospheric electricity, as to the artificial means employed.

The question of the source of the electricity of an aurora is an important one in meteorology; and